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Remarks

Claims 1-7 and 10-21 are pending. Claims 8 and 9 have been canceled. Claim 10 has been amended. Claims 19-21 have been added

§ 103 Rejections

Claims 1-18 stand rejected under 35 USC §103(a) as being unpatentable over Münzenberger et al. (U.S. No. 6,161,393) in view of Rodriguez et al. (U.S. No. 5,588,267). Application believes claims 1-18 are patentable over the cited prior art because: (1) the Rodriguez et al. reference is non-analogous art, and (2) even if it was analogous art, the criteria for establishing a prima facie case of obviousness has not been met.

According to §2141.02(a) of the M.P.E.P., to rely on a reference as a basis for rejection, the reference must either:

- (1) be in the field of applicant's endeavor, or
- (2) be reasonably pertinent to the particular problem with which the inventor was concerned. A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering the problem.

Rodriguez et al. is non-analogous art because: (1) it is not within the applicant's field of endeavor, and (2) it is not reasonably pertinent to the particular problem with which the inventor was concerned. The Rodriguez et al. reference is concerned with roof flashings. Roof flashings are used to seal around pipes extending through roofs or other exterior walls of houses and other buildings. (See Rodriguez et al., col. 2, lines 12-14). The present invention, in contrast, relates to firestopping and to firestop devices that prevent the spread of fire and smoke from one compartment of a building to another. (See present application at page 1, lines 12-30). Because Rodriguez et al. is from the technological field of roof flashing and the present invention is from the technological field of firestopping, Rodriguez et al. is not within the applicant's field of endeavor.

In addition, the Rodriguez et al. reference is not reasonably pertinent to the particular problem addressed by the present invention. The present invention is concerned with the

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problem of creating a firestop opening in a partition, and with the particular problem of adjusting the height of such a device to match the thickness of the partition. The Rodriguez et al. reference, in contrast, is concerned with the problem of adjusting the diameter of the device to accommodate pipes having different diameters and with the problem of creating a water tight seal with pipes of differing diameters. These problems are unrelated to the problem of adjusting the height of a device to match of the thickness of the partition.

To address the problem of adjusting the height of the device to match the thickness of the partition, the housing of present invention is provided with frangible connections defining removable bands that can be removed to reduce the height of the housing to match the thickness of the partition. (See present application at page 3, lines 19-22) The Rodriguez et al. roof flashing, in contrast, is provided with a frusto-conical collar having smaller diameter upper and larger diameter lower seals and an annular groove 20 to permit a larger diameter set of edge seals to be used for sealing against larger size pipe. (See Rodriguez et al. Abstract and col. 4, lines 6-13). The two sets of seals 8,9, therefore, are not provided to allow the height of the roof flashing to be adjusted such that the roof flashing can be used in partitions having a variety of thicknesses, but rather allow the device to be form a water tight seal with pipes having different diameters. It is also noted that the present invention includes a separate gasket 37 which "serves to form a smoke and water seal at ambient conditions with the pipe installed prior to expansion of the firestop material" (see present application at page 9, line 14-16), so the frangible connections and removable bands of the present invention are in no way related to forming a water tight seal.

Finally, if one were to shorten the Rodriguez roof flashing to match the thickness of a partition, the roof flashing would not form a water tight seal with the pipe except in the very rare situation where the height of the roof flashing, as determined by the thickness of the partition, also coincidentally produced the required diameter to form a water tight seal for a particular size pipe. In all other cases, the diameter of the roof flashing would either be too small, and the pipe would not pass through, or the diameter would be too large, and the roof flashing would not provide the required water tight seal.

In summary, the Rodriguez et al. reference is from a different technical field (namely, roof flashing, not firestopping), and addresses a different problem (namely, forming a water tight seal with pipes having different diameters, not adapting the height of the device to match the

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thickness of a concrete partition) than the present invention. Thus, it fails to meet the criteria for analogous art. The combination of elements from non-analogous sources, in a manner that reconstructs the applicant's invention only with the benefit of hindsight, is insufficient to present a prima facie case of obviousness. In re Oetiker, 24 USPQ2D 1443, 1446 (Fed. Cir. 1992).

According to §706.02(j) of the M.P.E.P., to establish a prima facie case of obviousness, the following three basic criteria must be met:

(1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine reference teachings;

(2) there must be a reasonable expectation of success; and

(3) the prior art reference (or references when combined) must teach or suggest all the claim limitations.

Regarding the suggestion or motivation to combine the reference teachings, the Examiner asserts that the motivation is found in the knowledge generally available to one of ordinary skill in the art. Applicant respectfully disagrees and requests that the Examiner cite a reference in support of this position. Münzenberger et al. indicates that the lengthening pipe 7 can be "easily cut-off" (col. 4, line 14, emphasis added) to adjust its length. Thus, Münzenberger et al. teaches that to adjust the height of the device, the lengthening pipe 7 is cut-off. No mention is made of any other method of adjusting the length. Furthermore, the fact that the pipe is described as being "easily" cut suggests that this method of adjusting the height is perfectly adequate, so there would be no reason to modify the lengthening pipe in any other manner.

Regarding the reasonable expectation of success, Applicant submits that even if the references were combined in the manner suggested by the Examiner, there is not a reasonable expectation of success. The Rodriguez et al. device includes a "frusto-conical shape collar member having a plurality of seals for sealingly engaging different diameter pipes." (Rodriguez et al. col. 1, lines 35-37) "To permit the lower larger diameter set of edge seals 12,13 to be used for sealing against larger size pipe, for example, 3 inch pipe, the upper set of seals 10,11 must first be removed from the collar member." (Rodriguez et al. col. 4, lines 6-11) Thus, Rodriguez et al. teach the use of a frusto-conical collar having two sets of seals to allow the device to be used with different diameter pipes that varies in diameter along its length. It is because of its

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conical shape that the length of the collar member 4 can be used to accommodate pipes having different diameters. The collar member, however, must be torn precisely at the location of the seals to perform properly, otherwise the opening will be too small and the pipe will not fit through the roof flashing, or the opening will be too large and will not form a water tight seal with the pipe, as described above.

The Münzenberger et al. device is provided with a cylindrical lengthening pipe 7 having a constant diameter along its length. (Münzenberger et al. Figs. 1 and 2) If the Münzenberger et al. device were modified in accordance with Rodriguez et al. to have a tapered lengthening pipe to accommodate different diameter pipes, when the lengthening pipe was cut-off to the desired length to match the thickness of the concrete floor, it would not match the diameter of the pipe. That is, the opening in the device would either be too small and the pipe would not fit through the opening, or the opening would be too large resulting in an excessively large or uneven gap between the device and the pipe. Thus, if the teachings of Rodriguez et al. and Münzenberger et al. were combined in the manner suggested, the references would produce an inoperative combination. The requisite reasonable expectation of success is therefore lacking.

Applicant also disagrees that Münzenberger et al. disclose a removable band including a pull tab providing grasping means for allowing a user to remove the bands from the housing at the frangible connection as defined in claim 2. The Examiner contends that reference numeral 8 of Münzenberger et al. points to a manually engageable pull tab. This is erroneous. Reference numeral 8 identifies "radial circumferential ribs" which serve as loss preventing means for the fixture, particularly during vertical mounting. (Münzenberger et al., col. 4, lines 19-21). These ribs, however, do not and are not intended to provide grasping means to allow a user to remove a band from the housing along the frangible connection as defined in claim 2.

Applicant also disagrees that Münzenberger et al. disclose a device wherein the sides wall and the shoulder portion include inner surfaces having ribs as defined in claim 5. The Examiner contends that reference numeral 15 of Münzenberger et al. identifies a rib. This is erroneous. Reference number 15 identifies a locking ring that retains the intumescent ring 11 in a predetermined position. (Münzenberger et al., col 4, lines 31-33) The locking ring, however, does not constitute "ribs" and it is not provided on the inner surface of the side wall and shoulder portion as defined in claim 5. Rather, the Münzenberger et al. locking ring 15 appears to perform

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the function of the retaining ring 38 of the present invention. Thus, even if the prior art references were combined, the combination would fail to disclose, teach, or suggest all the claim limitations. Accordingly, at least claims 2 and 5 are believed to contain separately patentable features.

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the application is requested.

Respectfully submitted,

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